CLAIMS

1.   Computer interface system comprising:

   (a)   means for providing a cursor for linkage with objects;

   (b)   means for generating the haptic representation of objects directly from the graphical representation of the objects for linkage with the cursor;

   (c)   means for creating, modifying, and saving haptic materials for creating a heuristic database to be used in the modeling of haptic virtual environments; and

   (d)   means for utilizing the material database for the modeling of haptic virtual environments.

2.   The system of claim 1 wherein said data base comprises one or more of static friction, dynamic friction, stiffness, and damping components